

ABSTRACT

A system and method of reassembling packets from traffic flows in a network element is provided. Each of the packets has at least one data part. The method includes the steps (1) queuing each of the data parts of the packets of traffic flows in a single reassembly queue in a sorted order, the data parts of each of the packets being continuously grouped without data parts of another packet being interleaved therein and (2) reassembling the data parts of each of the packets queued in the single reassembly queue.